WHAT IS CLAIMED IS:

1. A solid-state device comprising:

a terminal having a plurality of fingers; and

wherein said fingers are arranged so that the device is heat transfer balanced.

2. The device of Claim 1, wherein said fingers are arranged in a row and spaced non-uniformly in the row.

3. The device of Claim 1, wherein each said finger is associated with a corresponding one of a plurality of sub-cells, wherein said sub-cells are arranged in a row and spaced non-uniformly.

4. The device of Claim 3, wherein each said sub-cell includes one finger.

5. The device of Claim 3, wherein each said sub-cell is associated with one of a plurality of rows of sub-cells.

6. The device of Claim 3, wherein the device has a terminal area defining opposed edges, and wherein adjacent ones of said sub-cells are spaced a greater distance at or near a center of the device than at or near the opposed edges.

7. The device of Claim 3, wherein a number of fingers in a sub-cell at or near a center of the device is less than a number of fingers in a sub-cell at or near an edge of a device.

8. The device of Claim 7, wherein the device is an HBT.

9. The device of claim 8, wherein the device is a SiGe HBT.

10. The device of Claim 7, wherein the device defines a terminal region and the terminal region is sized for a high power application.

11. The device of Claim 1, wherein each finger is biased for its maximum current density during operation.

12. The device of Claim 1, wherein the device defines a layout, and the layout is a ballasting resistors-free layout.

13. The device of Claim 1, wherein said fingers are emitter fingers.

14. The device of Claim 1, wherein said fingers are arranged so that a peak oscillation frequency, $f_{max,}$ associated with the device is generally independent of the number of fingers.

15. The device of Claim 1, wherein each said finger is associated with a corresponding one of a plurality of sub-cells, and wherein said sub-cells are spaced so that at least one of consecutive adjacent pairs of said sub-cells are spaced differently.

16. A solid-state device comprising:

a terminal having a plurality of fingers;

wherein said fingers are arranged so that a peak oscillation frequency, $f_{max,}$ associated with the device is generally independent of the number of said fingers.

17. The device of Claim 16, wherein said fingers are arranged in a row and spaced non-uniformly in the row.

18. The device of Claim 16, wherein each said finger is associated with a corresponding one of a plurality of sub-cells, wherein said sub-cells are arranged in a row and spaced non-uniformly.

19. The device of Claim 18, wherein said sub-cells are arranged in a plurality of non-uniformly spaced rows.

20. The device of Claim 18, wherein said sub-cells each includes one finger

21. The device of Claim 17, wherein the device has a terminal area defining opposed edges, and wherein adjacent ones of said sub-cells are spaced a greater distance at or near a center of the device than at or near the opposed edges.

22. The device of Claim 16, wherein each finger is biased for its maximum current density.

23. The device of Claim 16, wherein the device is an HBT, and said fingers are emitter fingers.

24. A method of producing a high power solid-state device comprising:

providing a substrate for supporting a terminal having a plurality of fingers; and

arranging the fingers in a plurality of sub-cells defining at least one row so that the device is heat transfer balanced.

25. The method of Claim 24, wherein said sub-cells are arranged so that consecutive adjacent pairs of the sub-cells in the at least one row are spaced differently.

26. The method of Claim24, wherein the at least one row includes a plurality of rows.

27. The method of Claim 26, wherein the sub-cells between the plurality of rows are spaced non-uniformly.

28. The method of Claim 24, further comprising determining a number of the sub-cells and spacings between the sub-cells using a thermal simulation program.

29. The method of Claim 28, wherein the thermal simulation program uses finite element analysis.

30. The method of Claim 24, wherein the device is one of an HBT and a FET.

31. The method of Claim 24, wherein the device defines a layout that is ballasting resistors-free.

32. A method of heat transfer balancing a solid-state device, the method comprising:

arranging a plurality of fingers of a terminal of the device so that a junction temperature across the device in operation is generally uniform without using ballasting resistors.

33. The method of Claim 32, wherein each finger is biased for its maximum current density.

34. The method of Claim 33, wherein the device is an HBT, and the terminal is an emitter terminal.